

Fig 1A

(PRIOR ART)
8 POINTS DFT OBTAINED BY COMBINING TWO FOUR POINTS DFT

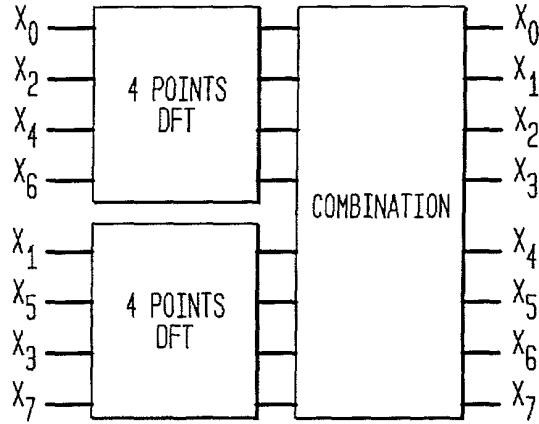


Fig 1B

(PRIOR ART)
8 POINTS DFT OBTAINED BY COMBINING FOUR TWO POINTS DFT

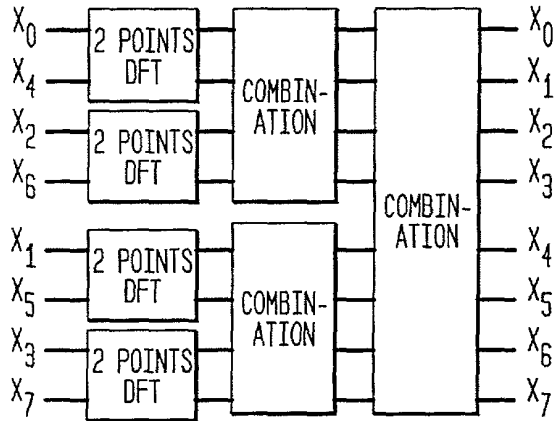


Fig 1C

(PRIOR ART)
DIT RADIX-2 BUTTERFLY COMPUTATION

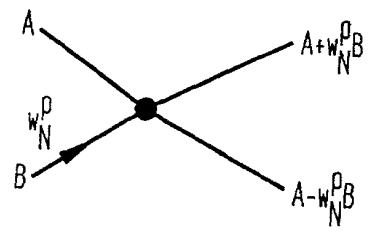


Fig 2A1

(PRIOR ART)
DIF RADIX-2 BUTTERFLY COMPUTATION

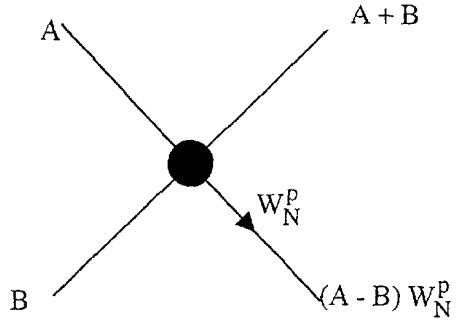


Fig 2A2

(PRIOR ART)
BUTTERFLIES REPRESENTATION OF AN 8 POINTS FFT
DFT N=2 COMBINATION COMBINATION
1302 1304 1306

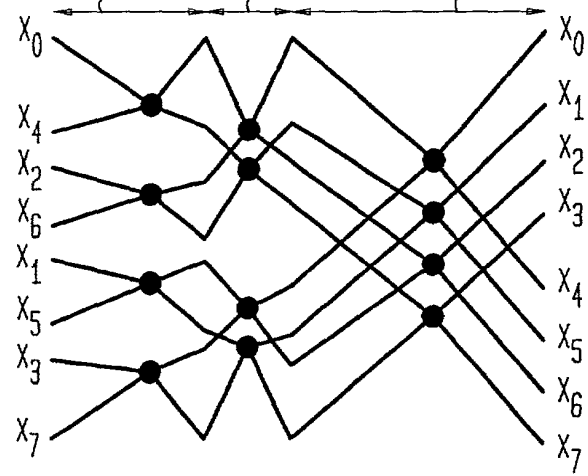


Fig 2B

"PAPER" FILED

FIG. 2C
(PRIOR ART)

IN PLACE FFT WITH BIT REVERSED INPUTS AND NORMALLY ORDERED OUTPUTS ($r=2$)

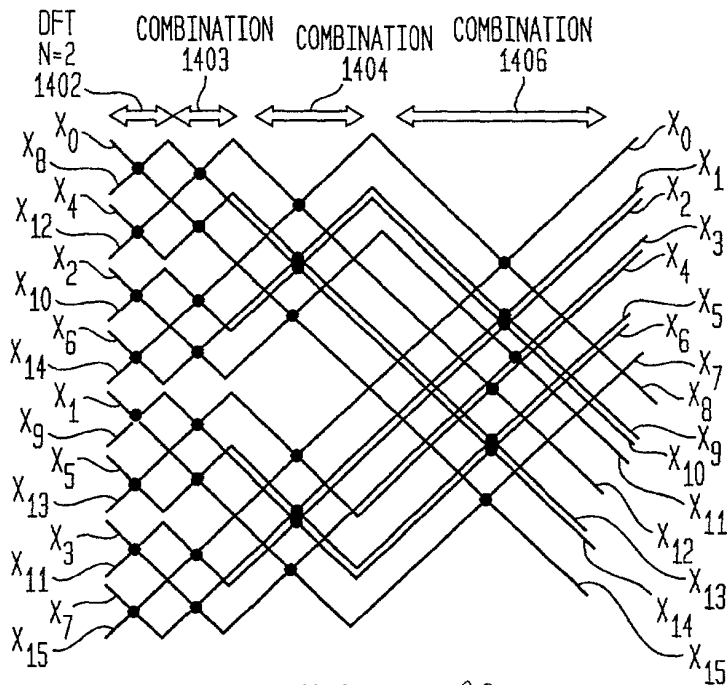
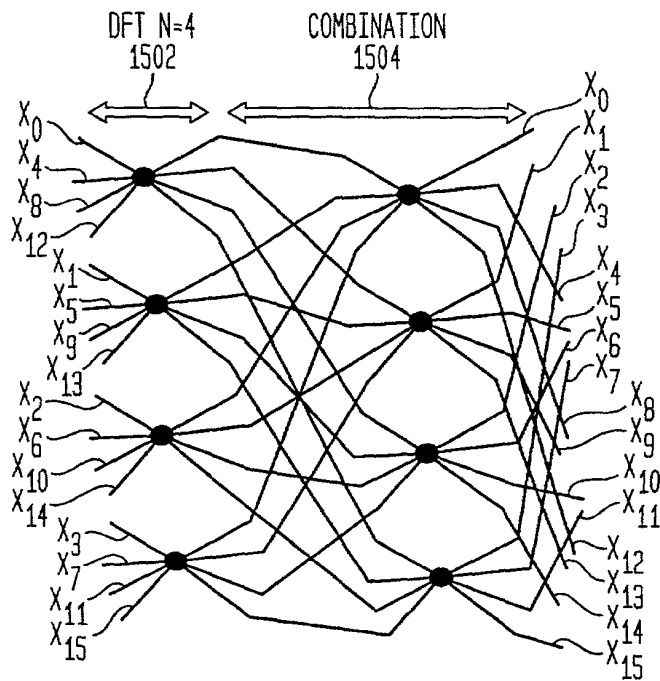


FIG. 2D
(PRIOR ART)

IN PLACE FFT WITH BIT REVERSED INPUTS AND NORMALLY ORDERED OUTPUTS



FOOTED REEDED

FIG. 3A
JABER'S RADIX- r DIF ENGINE

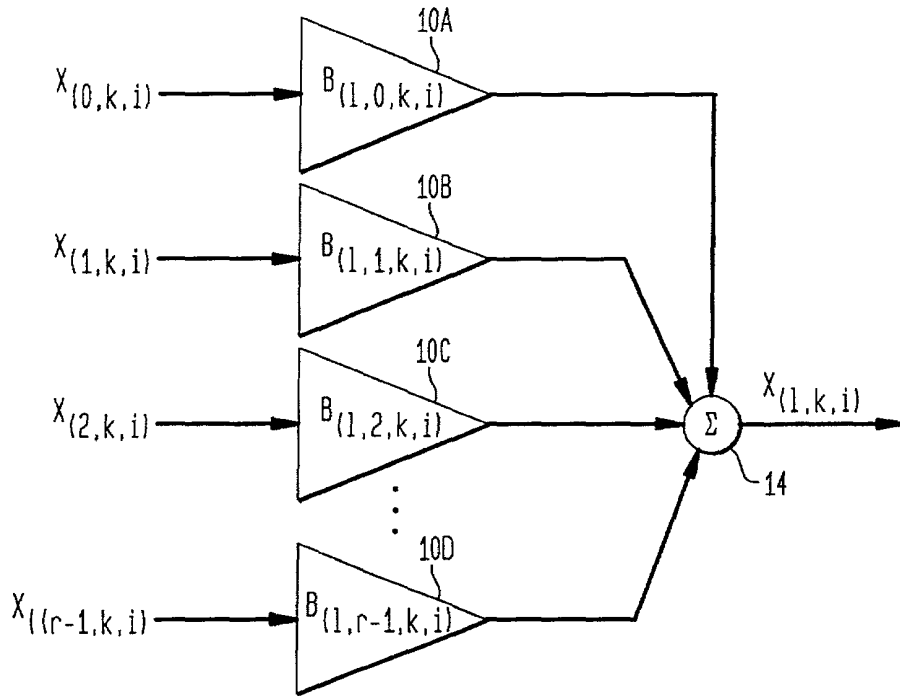


FIG. 3B
SIMPLIFIED JABER'S RADIX- r DIF ENGINE

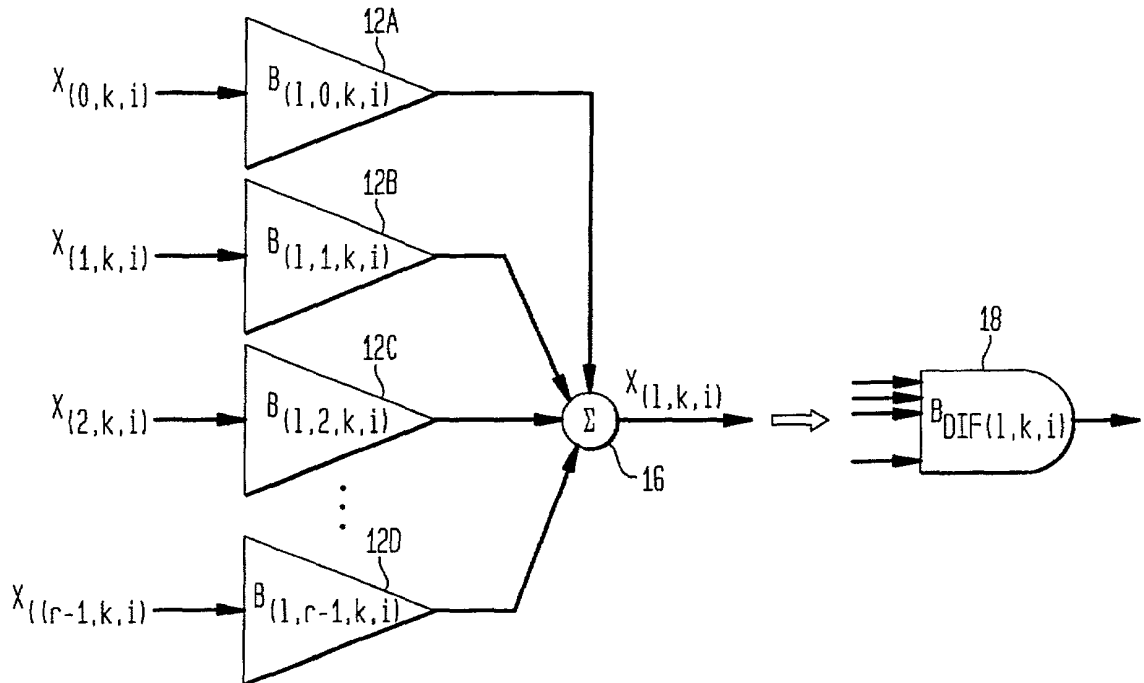


FIG. 4A
 JABER'S RADIX-r DIT ENGINE

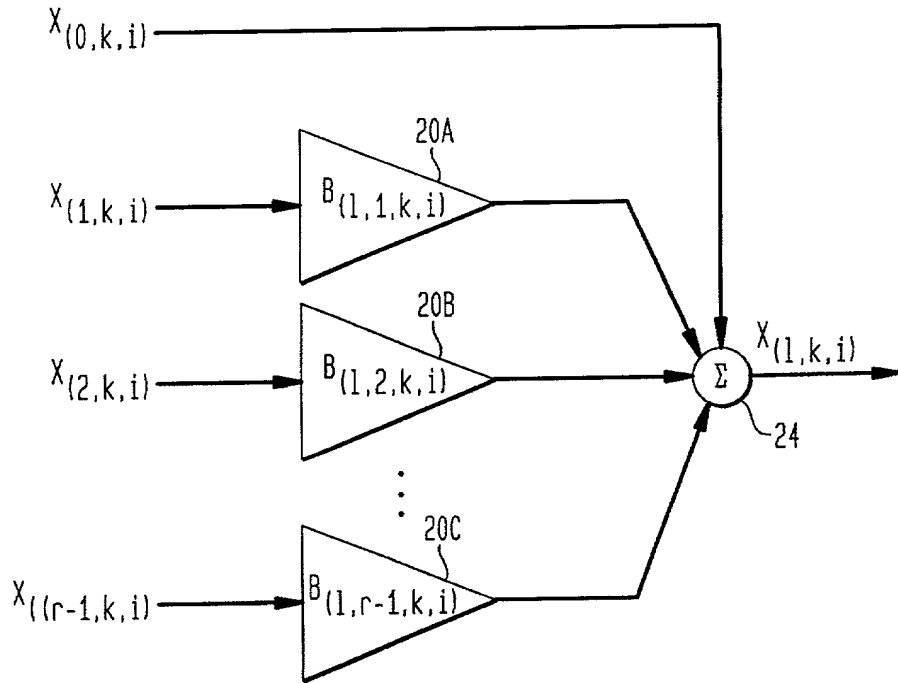
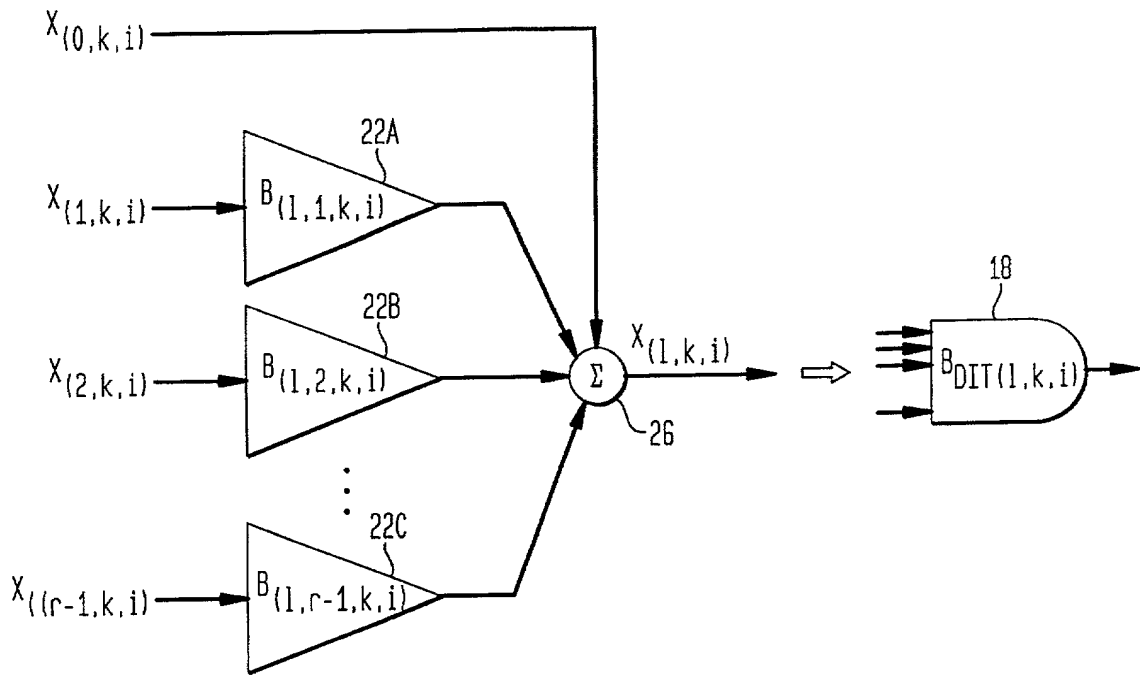


FIG. 4B
 SIMPLIFIED JABER'S RADIX-r DIT ENGINE



FOOTNOTES

FIG. 5A
 JABER'S RADIX- r DIF MODULE

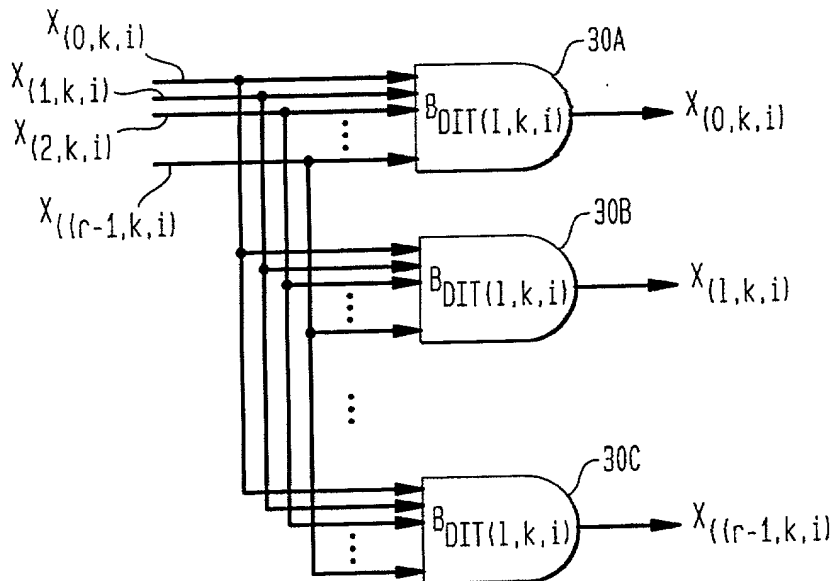
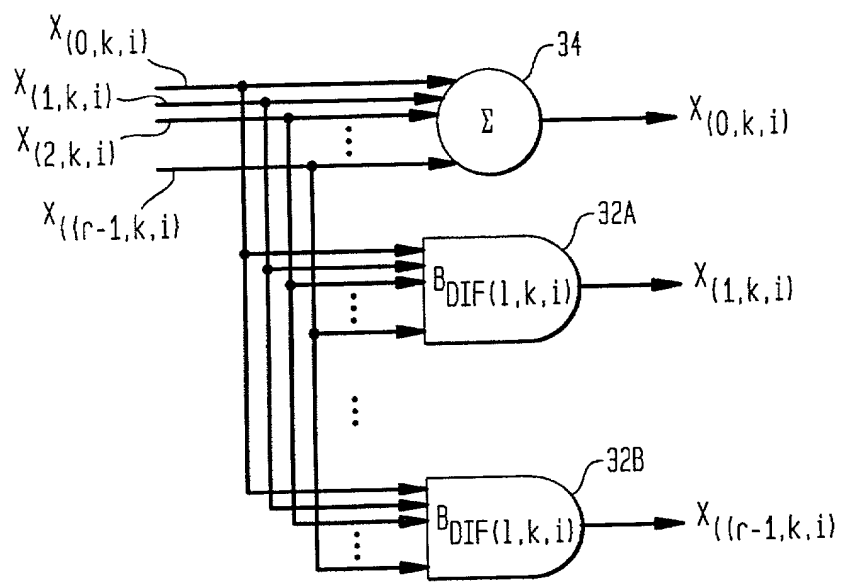


FIG. 5B
 JABER'S RADIX- r DIT MODULE



FOOTNOTES ARE ON PAGE 60

FIG. 6A
RADIX-8 DIT FFT ENGINE

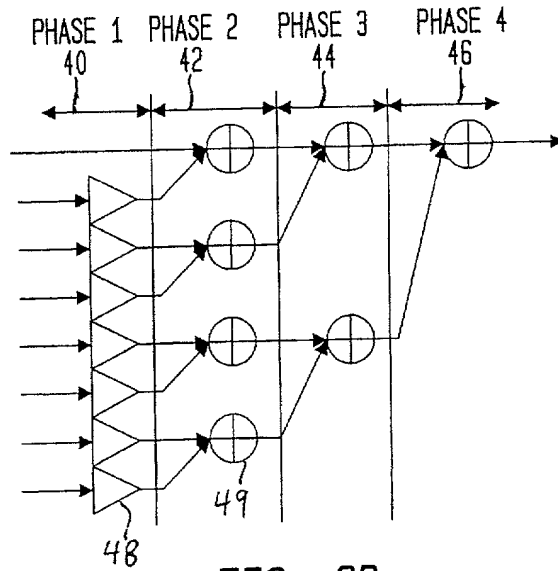
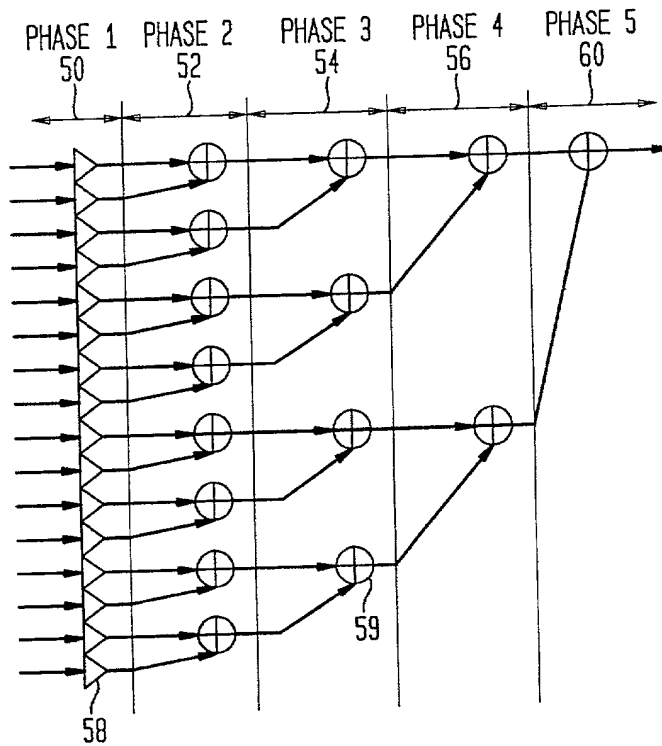


FIG. 6B
RADIX-16 DIF FFT ENGINE



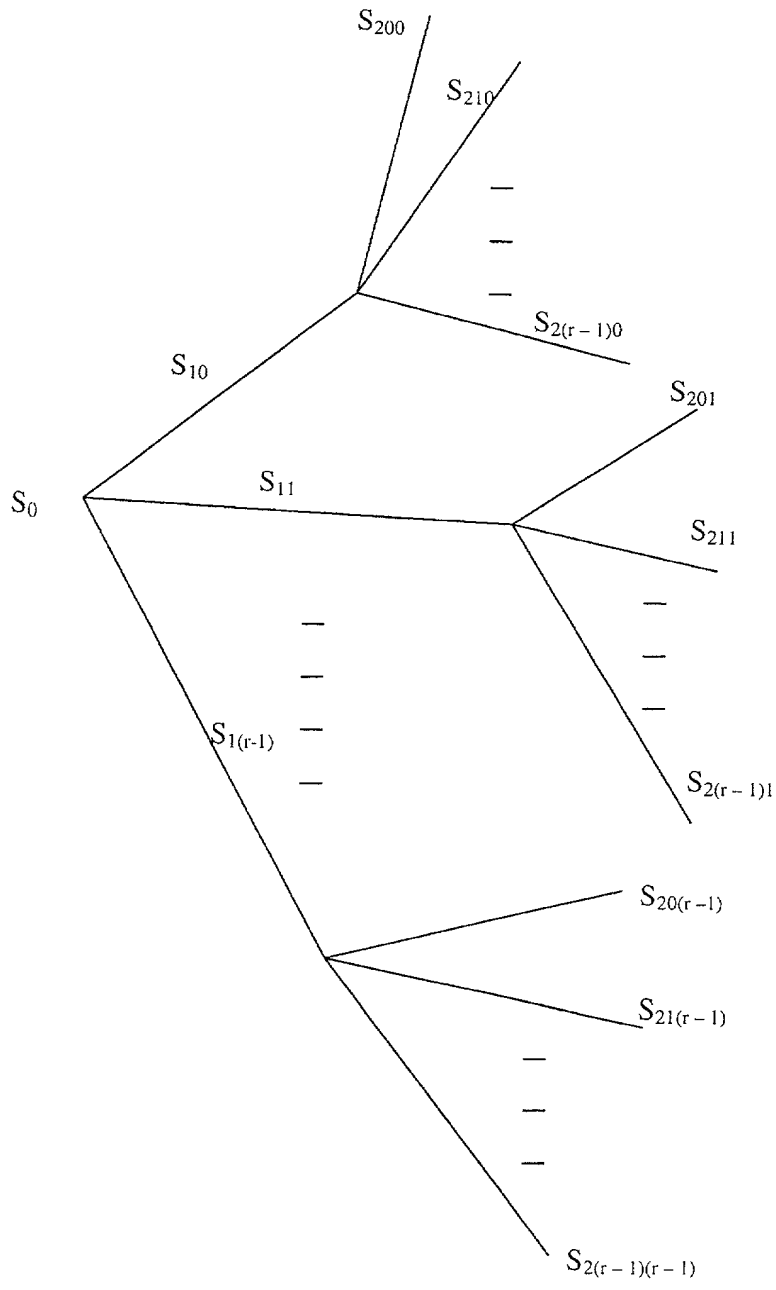


Fig 7

FIG. 8

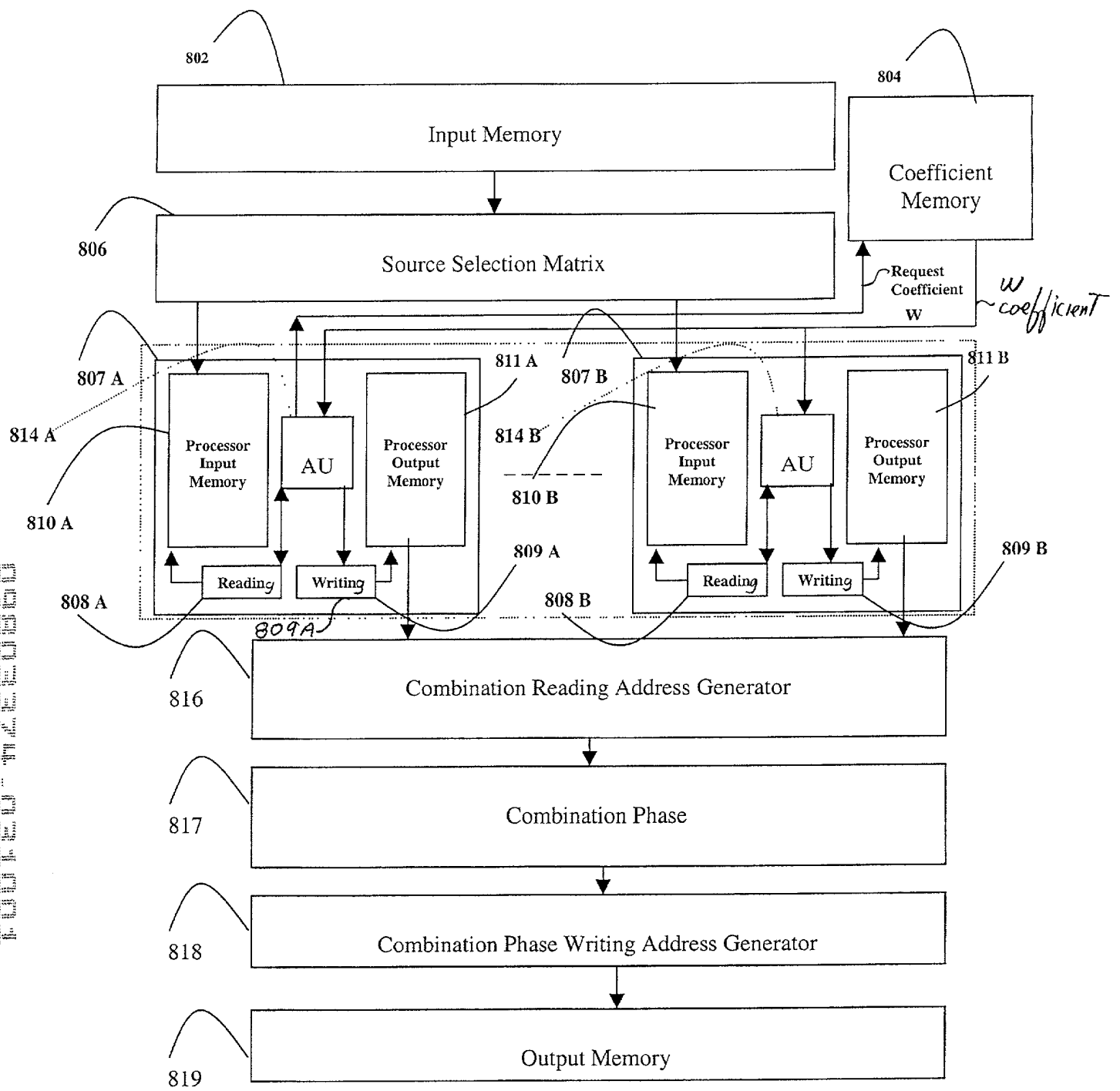


Fig 8

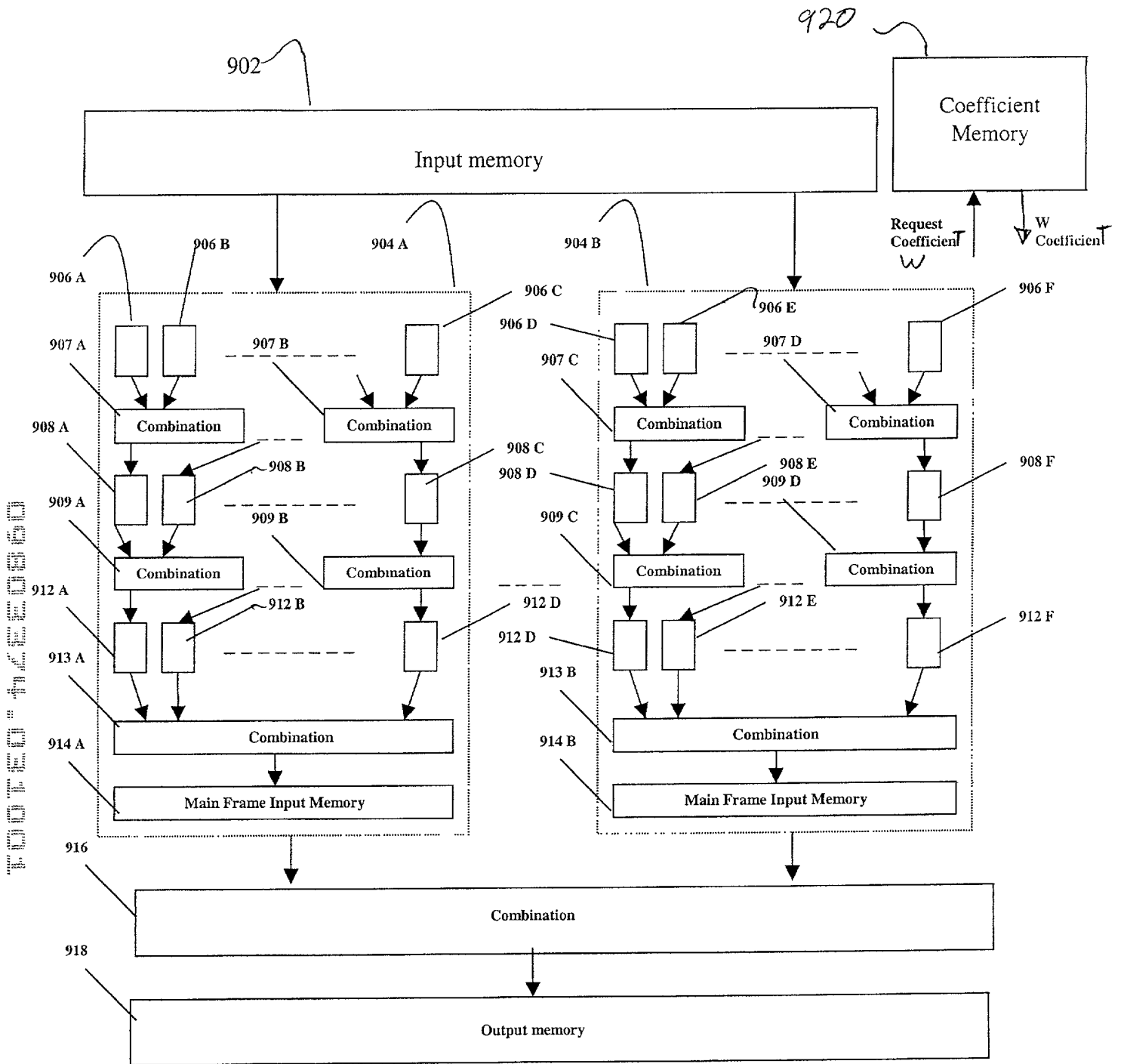
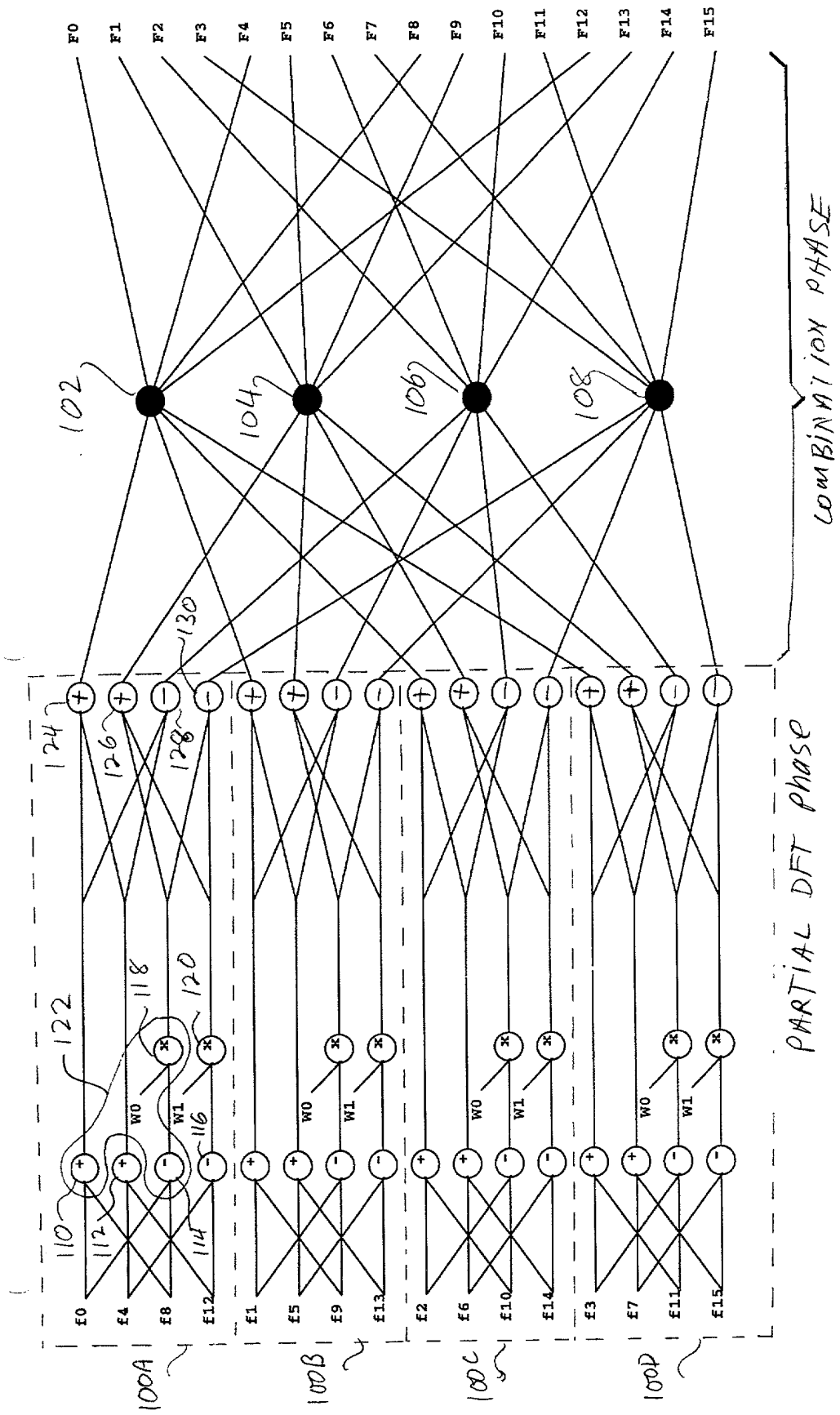


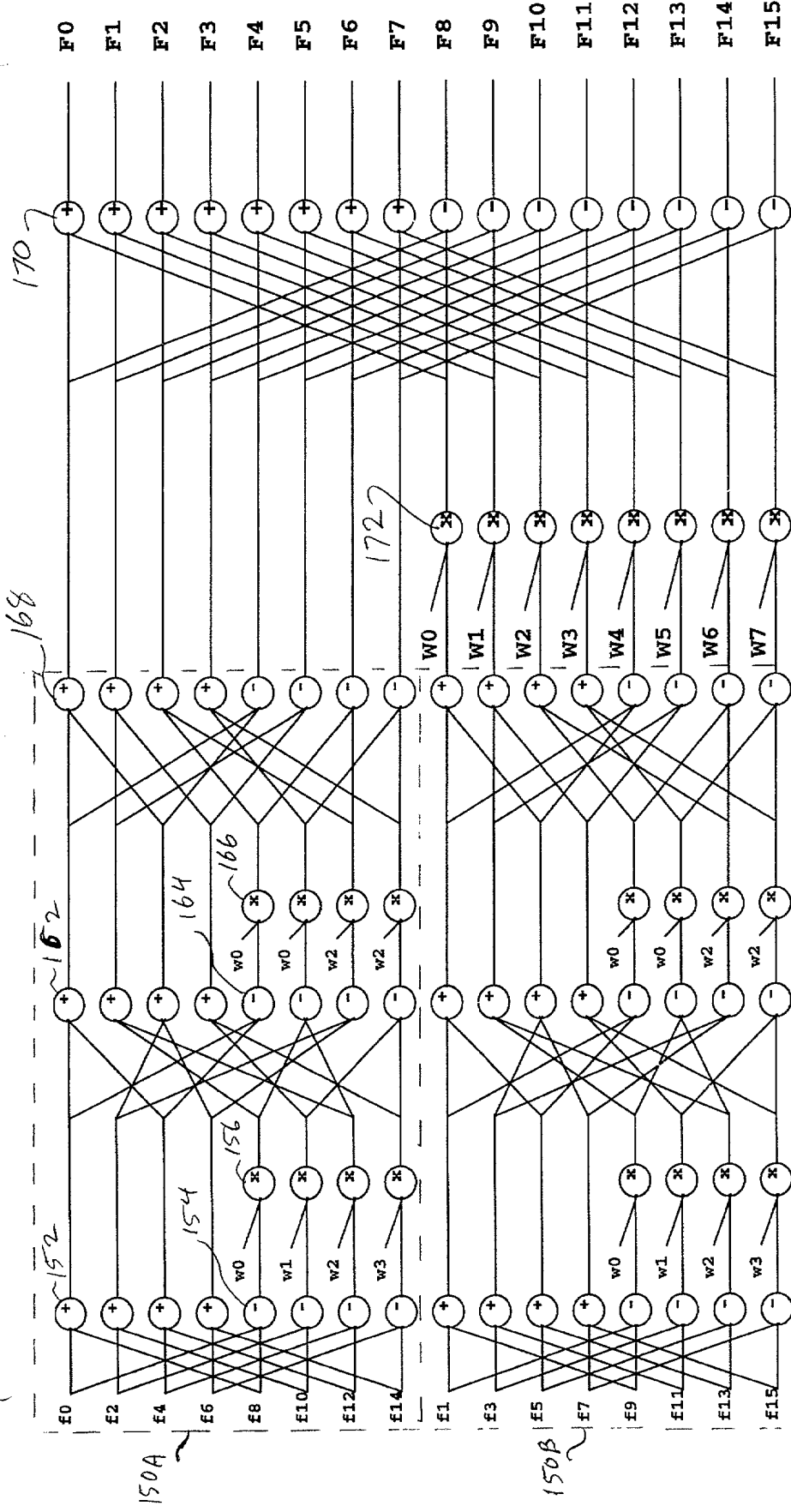
Fig 9

FIGURE 10



16 Points FFT radix 2 on four parallel processors with combination phase

FIG 10



PARTIAL DFT PHASE

COMBINATION PHASE

16 POINTS FFT MAPPING WITH COMBINATION PHASE

FIG 11